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y,	FORM		First Named Inventor		Guillermo J. Tearney				
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	r all correspondence after initial of Pages in This Submission	Attorney Docket Number		- 475387-00020					
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Amendm Amendm A Extensio Express Informati Certified Document Reply to Incomple	dee Attached dent/Reply differ Final diffidavits/declaration(s) of Time Request Abandonment Request on Disclosure Statement Copy of Priority of(s) Missing Parts/ dee Application deply to Missing Parts onder 37 CFR 1.52 or 1.53		Drawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Terminal Disclaimer Request for Refund CD, Number of CD(s) Landscape Table on C	on Address	After Appear of Appear (Appear (Appear Appear (Appear Appear Appe	Allowance Communication to TC al Communication to Board peals and Interferences al Communication to TC al Notice, Brief, Reply Brief) ietary Information s Letter Enclosure(s) (please Identify v): form with 31 references and eipt Postcard			
	SIGNA	TURE C	F APPLICANT, ATTO	RNEY, O	R AGENT				
Firm Name	Dorsey & Whitney, L.L.P.								
Signature				`					
Printed name	Gary Abelev, Esq.		· · · · · · · · · · · · · · · · · · ·						
Date	February 17, 2006			Reg. No.	Reg. No. 40,479				
I hereby certify the sufficient postage the date shown be	nat this correspondence is t e as first class mail in an en	peing facsi	CATE OF TRANSMISS mile transmitted to the USP1 dressed to: Commissioner fo	O or deposi	ited with the U	nited States Postal Service with Alexandria, VA 22313-1450 on			
Signature		~				· · · · · · · · · · · · · · · · · · ·			
Typed or printed	gary Abeley, Es				Date	February 17, 2006			

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

: Guillermo J. Tearney et al.

Serial No.

10/765,430

Filed

January 26, 2004

Entitled

SYSTEM AND METHOD FOR IDENTIFYING TISSUE USING

LOW-COHERENCE INTERFEROMETRY

Group Art Unit

3737

Examiner

To be assigned

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 I hereby certify that this document is being sent via First Class U. S. mail addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on this day of February 17, 2006.

(Signature)

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicants bring to the attention of the Examiner the documents listed on the attached Form PTO 1449, and respectfully request that the listed documents be considered by the Examiner and made of record in the above-captioned application. Copies of the United States patent references listed on the Form PTO-1449 are not enclosed, but the PCT/foreign/non-patent references are enclosed.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed documents are material or constitute "prior art." If the Examiner applies the documents as prior art against any claim in the application and applicants determine that the cited documents do not constitute "prior art" under

036140/US - 475387-00020 PATENT

United States law, applicants reserve the right to present to the Office the relevant facts and law

regarding the appropriate status of the documents.

Applicants further reserve the right to take appropriate action to establish the

patentability of the disclosed invention over the listed documents, should the documents be

applied against the claims of the present application.

This submission is being filed before any action by the U.S. Patent and

Trademark Office on the merits. Therefore, applicants do not believe that any fee is due in

connection with the submission of this paper. However, if any fee is due, or if any overpayment

has been made, the Commissioner is authorized to charge any such fee or credit any

overpayment, to our Deposit Account No. 50-2054.

Respectfully submitted,

DORSEY & WHITNEY, LLP

Gary Abelev

PTO Reg. No. 40,479

Attorneys for Applicants

(212) 415-9371

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Atty. Docket No. 036140/US – 475387-00020

Serial No. 10/765,430

INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

(Use several sheets if necessary)

Applicant(s)

Guillermo J. Tearney

Filing Date January 26, 2004

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Date Considered

^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Form PTO-1449 U.S. Department of Commerce (REV. 2-82) Patent and Trademark Office									Atty. Docket No. Serial No. 10/765,430)	
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Page 3 of 4 Form PTO-1449 U.S. Department of Commerce Atty. Docket No. Serial No. (REV. 2-82) Patent and Trademark Office 036140/US - 475387-00020 10/765,430 INFORMATION DISCLOSURE STATEMENT BY APPLICANT Applicant(s) (Use several sheets if necessary) Guillermo J. Tearney Filing Date Group January 26, 2004 3737 David J. Briers, "Speckle fluctuations and biomedical optics: implications and applications", Optical Engineering, 1993, 32(2):277-283. Clark et al., "Tracking Speckle Patterns with Optical Correlation", SPIE, 1992, 1772:77-87. Facchini et al., "An endoscopic system for DSPI", Optik, 1993, 95(1):27-30. Hrabovsky, M., "Theory of speckle dispacement and decorrelation: application in mechanics", SPIE, 1998, 3479:345-354. Sean J. Kirkpatrick et al., "Micromechanical behavior of cortical bone as inferred from laser speckle data", Journal of Biomedical Materials Research, 1998, 39(3):373-379. Sean J. Kirkpatrick et al., "Laser speckle microstrain measurements in vascular tissue", SPIE, 1999, 3598:121-129. Loree et al., "Mechanical Properties of Model Atherosclerotic Lesion Lipid Pools", Arteriosclerosis and Thrombosis, 1994, 14(2):230-234. Podbielska, H. "Interferometric Methods and Biomedical Research", SPIE, 1999, 2732:134-141. Richards-Kortum et al., "Spectral diagnosis of atherosclerosis using an optical fiber laser catheter", American Heart Journal, 1989, 118(2):381-391. Ruth, B. "blood flow determination by the laser speckle method", Int J Microcirc: Clin Exp, 1990, 9:21-45. Shapo et al., "Intravascular strain imaging: Experiments on an Inhomogeneous Phantom", IEEE Ultrasonics Symposium 1996, 2:1177-1180. Shapo et al., "Ultrasonic displacement and strain imaging of coronary arteries with a catheter array", IEEE Ultrasonics Symposium 1995, 2:1511-1514. Thompson et al., "Imaging in scattering media by use of laser speckle", Opt. Soc. Am. A., 1997, 14(9):2269-2277. Examiner Date Considered

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Form PTO-1449 U.S. Department of Commerce (REV. 2-82) Patent and Trademark Office	Atty. Docket No. 036140/US – 475387-00020	Serial No. 10/765,430				
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· · · · · · · · · · · · · · · · · · ·	Filing Date January 26, 2004	Group 3737				
Thompson et al., "Diffusive media ch 36(16):3726-3734.	aracterization with laser speckle", A	pplied Optics, 1997,				
Tuchin, Valery V., "Coherent Optical Dynamics," Journal of Biomedical Op	n and speckling studies in skeletal and heart muscle", Biomed,					
M. Wussling et al., "Laser diffraction Biochim, Acta, 1986, 45(1/2):S 23- S						
T. Yoshimura et al., "Statistical prope 3(7):1032-1054						
Zimnyakov et al., "Spatial speckle con Applied Optics 1997, 36(22): 5594-56	rrelometry in applications to tissue s	tructure monitoring",				
Zimnyakov et al., "A study of statistic to the diagnosis of structural changes 753.	ical properties of partially developed speckle fields as applied in human skin", Optics and Spectroscopy, 1994, 76(5): 747-polarization analysis as an approach to turbid tissue structure 80.					
Zimnyakov et al., "Speckle patterns p monitoring", <u>SPIE</u> 1999, 2981:172-18						
Ramasamy Manoharan et al., "Bioche using FT-IR microspectroscopy", Ath	emical analysis and mapping of atherosclerotic human artery nerosclerosis, May 1993, 181-1930.					
N.V. Salunke et al., "Biomechanics of Engineering 1997, 25(3):243-285.	f Atherosclerotic Plaque" Critical Reviews™ in Biomedical					

Examiner Date Considered

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^{*} Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.